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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,808	07/17/2003	Kunihiko Miyazaki	62758-043	8995

7590 02/06/2007  
MCDERMOTT, WILL & EMERY  
600 13th Street, N.W.  
Washington, DC 20005-3096

EXAMINER
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NGUYEN, MINH DIEU T

ART UNIT	PAPER NUMBER
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2137

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/06/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/620,808

Applicant(s)

MIYAZAKI ET AL.

Examiner

Minh Dieu Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 17 January 2007.  
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 5-9 is/are pending in the application.  
4a) Of the above claim(s) 1-4 and 10-19 is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 5-9 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 7/17/2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application  
6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This office action is in response to the communication dated 1/17/2007 with the election of group III (claims 5-9) for prosecution.
2. Claims 5-9 are pending. Claims 1-4 and 10-19 are being withdrawn as being directed to a non-elected invention.

### ***Drawings***

3. The drawings are objected to under 37 CFR 1.83(a) because they fail to show "a signature storage service apparatus 6" as described in the specification (paragraph 0142). Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top

margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Specification***

4. The abstract of the disclosure is objected to because it should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc. It is suggested that the sentence "The disclosure also provides a method for verification that reflects the reliability of a signature history properly and a method for arbitration and an arbitrator apparatus that solve a dispute on correctness of a signature." should be "A method for verification that reflects the reliability of a signature history properly and a method for arbitration and an arbitrator apparatus that solve a dispute on correctness of a signature."

Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

5. Claims 5-9 are objected to because of the following informalities:

a) As to claim 5, the phrase "A method for managing the log list, which is a issuing history of a digital signature" should be "A method for managing a log list, which is an issuing history of a digital signature"; "verifying validity of the digital signature of

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the digital signer" should be "verifying validity of the digital signature of a digital signer"; "verifying consistency between the accepted log list and a registered log list of the registered digital signer" should be "verifying consistency between the accepted log list and a registered log list of a registered digital signer" and "adding and registering the log list with the confirmed consistency to the registered log list of the digital signer" should be "adding and registering the **accepted** log list with the confirmed consistency to the registered log list of the digital signer".

b) As to claim 6, the phrase "transmitting a fact that the log list is added" should be "transmitting a fact that the **accepted** log list is added".

c) As to claim 7, the phrase "A method for managing a log list" should be "**The** method for managing a log list"; "requests registration of the log list" should be "requests registration of the **accepted** log list"; "the newest log data included in the log list is deleted if the additional registration notice is received" should be "the newest log data included in the **accepted** log list is deleted if **an** additional registration notice is received".

d) As to claim 8, the phrase "The method for verification of a digital signature" should be "**The method for managing a log list**" for claim consistency; "the public key of the user" should be "a public key of a user".

e) As to claim 9, the phrase "The method for verifying a digital signature" should be "**The method for managing a log list**" for claim consistency.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 5-7 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyazaki et al. (EP 1094424).

a) As to claim 5, Miyazaki discloses a method for managing a log list, which is an issuing history of a digital signature issued on a message by a digital signature issue side apparatus, in a log list storage side apparatus (i.e. a signature log management apparatus manages the signature log table for each digital signer side apparatus, see Miyazaki: 0067) comprising: accepting the log list from the digital signature issue side apparatus (i.e. digital signer side apparatus transmits all signature logs (called a signature log list) recorded in the signature log table, see Miyazaki: 0051), verifying validity of the digital signature of a digital signer signed on the log list or log list registered request data (i.e. checking the validity of the signature of a digital signer, see Miyazaki: 0042, 0046), verifying consistency between the accepted log list and a registered log list of a registered digital signer (i.e. checking the matching of the signature log, expressed as Nth signature log, with the immediately previous N-1th signature log (whether mutual consistency is maintained), see Miyazaki: 0101), adding and registering the accepted log list with the confirmed consistency to the registered log list of the digital signer (i.e. if it is confirmed that a reliable signature log and the

signature log registered immediately before the reliable signature log match, that is, they are consistent with each other, the immediately previous signature log also can be regarded as a reliable signature log. By repeating this procedure, the range of reliable signature logs included in a submitted log list can be determined. It is inherently understood that when this procedure is repeated, then the accepted log list with the confirmed consistency is added and registered to the registered log list of the digital signer, see Miyazaki: 0114).

b) As to claim 6, Miyazaki discloses the method for managing a log list according to claim 5, further comprising: confirming the consistency is confirmed (i.e. confirming that each signature log is consistent with the immediately previous one, see Miyazaki: 0114), and transmitting a fact that the accepted log list is added and registered to the registered log list of the digital signer, to a digital signer side apparatus (i.e. a message indicating registration with the signature log list, see Miyazaki: 0121).

c) As to claim 7, Miyazaki discloses the method for managing a log list according to claim 5, comprising: a step in which the digital signature issue side apparatus requests registration of the log list to the log list storage side apparatus (i.e. each digital signer side apparatus may register a signature log with the signature log table managed by a signature log management apparatus, see Miyazaki: 0067), and a step in which log data other than the newest log data included in the accepted log list is deleted if an additional registration notice is received (see Miyazaki: 0064).

d) As to claim 9, Miyazaki discloses the method for verifying a digital signature according to claim 7, wherein the digital signature issue side apparatus

requests registration of the log list every time when a digital signature is issued (see Miyazaki: 0067).

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazaki et al. (EP 1094424) in view of Bisbee et al. (7,162,635).

Miyazaki discloses the method for verification of a digital signature according to claim 7, with the digital signature issue side apparatus (see Miyazaki: Fig. 1, element 1) transmits public key certificate, log list data to the purchaser side apparatus (see Miyazaki: 0080) and the log list storage side apparatus (see Miyazaki: 0067), Miyazaki is silent on the capability of the digital signature issue side apparatus performs a step comprising issuing electronic data of a deposition request document for indicating intention of a registration request, and a step comprising transmitting the issued deposition request document electronic data, a public key certificate, and log list data, to the log list storage side apparatus, and as the step for verifying the validity of the digital signature, the log list storage side apparatus performs: a step comprising verifying the validity of the received public key certificate and a step comprising checking whether or not the deposition request document is verified correctly by use of the public key of the



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user included in the public key certificate. Bisbee is relied on for the teaching of the digital signature issue side apparatus performs a step comprising issuing electronic data of a deposition request document for indicating intention of a registration request (i.e. trusted custodial utility (TCU) is a trusted third-party repository of information object. The TCU governs transaction requests (by party submitting a digitally signed object to be bound by their digital signatures) and access to the repository over the respective life cycles of all documents and objects, see Bisbee: col. 3, line 49 to col. 4, line 6) and a step comprising transmitting the issued deposition request document electronic data, a public key certificate, and log list data, to the log list storage side apparatus (see Bisbee: col. 3, lines 44-52; col. 11, lines 39-45), and as the step for verifying the validity of the digital signature, the log list storage side apparatus performs: a step comprising verifying the validity of the received public key certificate (i.e. TCU validates the transfer agent's identity and rights and verifies the integrity of submitted information objects, see Bisbee: col. 12, lines 32-57) and a step comprising checking whether or not the deposition request document is verified correctly by use of the public key of the user included in the public key certificate (see Bisbee: col. 2, lines 45-52). It would have been obvious to one of ordinary skill in the art at the time of the invention to employ the use of the digital signature issue side apparatus performs a step comprising issuing electronic data of a deposition request document for indicating intention of a registration request, and a step comprising transmitting the issued deposition request document electronic data, a public key certificate, and log list data, to the log list storage side apparatus, and as the step for verifying the validity of the digital signature, the log list storage side

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apparatus performs: a step comprising verifying the validity of the received public key certificate and a step comprising checking whether or not the deposition request document is verified correctly by use of the public key of the user included in the public key certificate in the system of Miyazaki, as Bisbee teaches so as to provide security for the transfer and retrieval of documents and other information objects in digital formats (see Bisbee: col. 1, lines 22-24).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh Dieu Nguyen whose telephone number is 571-272-3873.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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